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THE RELATIONSHIP OF POSTSECONDARY OUTCOMES FOR STUDENTS WITH
DISABILITIES IN KENTUCKY SCHOOLS

A Dissertation
Presented to
The Faculty of the Educational Leadership Doctoral Program
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

By
Stephanie Dawn Cornwell

December 2014

THE RELATIONSHIP OF POSTSECONDARY OUTCOMES FOR STUDENTS WITH
DISABILITIES IN KENTUCKY SCHOOLS

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I dedicate this to my family.

Mom and Dad, you have supported me throughout this journey through your patience, kindness, and understanding. I love you, and I thank you for being such a wonderful support system throughout the process. Without you, I would not have been able to make it. You have always pushed me to do my best, and I thank you for that.

Keighan and Liam, I hope one day you will understand why Mommy was away so much. I have done this for all of our lives. I am sorry that I spent weekends in school when I should have been there holding you. I know that we will make up for the lost time now that it is finished. I love each of you to the moon and back.

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Second, I dedicate this to my students, past, present, and future.

This project was truly inspired by a need I noticed while working with you. I have worked in a high school special education setting for nine years, and this is the biggest need I have noticed. You each deserve a change to occur to make that leap into adulthood a little easier. I have encountered many students who have touched me personally, and I easily become attached to my ever changing classes of students. You never seem to stop amazing me with your drive to learn, kind hearts, and true acceptance. Thank you for allowing me to be a small part of your lives.

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THE RELATIONSHIP OF POSTSECONDARY OUTCOMES FOR STUDENTS WITH DISABILITIES IN KENTUCKY SCHOOLS

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Directed by: Janet Applin, Nedra Atwell, and Gail Kirby

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In order to compare the postsecondary success rates of students with disabilities in rural areas to those in urban areas in Kentucky, data were accessed from the Kentucky Postsecondary Outcome Study, a longitudinal study created to monitor the employment and education status of students with disabilities during their final year of high school and one year after exiting high school. U.S. Census data were also utilized to determine various demographic information and rural or urban classification of selected areas. Results show that the geographic classification as rural and suburban has a strong relationship with the postsecondary outcome for students with disabilities in Kentucky. Those from urban classification areas were more likely to enroll in postsecondary training or school than students from rural and suburban classification areas.

CHAPTER I: INTRODUCTION

Background

Rural to urban areas often have been the subject of research when discussing the American educational system. Student performance in secondary schools can negatively impact the postsecondary enrollment eligibility and reduce postsecondary enrollment. School experiences of many rural students consistently differ from those who attend more urban schools (Clasemann, 2012). Stanley, Comello, Edwards, and Marquart (2007) found that the free and reduced lunch rate of rural areas was higher than in urban areas and that a negative relationship exists for student performance. Clasemann also shared that a student's exposure to higher education can have a direct effect on the likelihood of attending a postsecondary institution. This study found that the socioeconomic status (SES) level of an area is a variable that directly impacts a student's success. As rural areas are more likely to consist of lower SES individuals (Stanley et al., 2007) the rural status of an area can have a direct impact on the success of graduates. In a 2012 study, Clasemann found that rural students were more likely to enroll in a community college or find employment. In contrast, students from urban and rural areas were more likely to enroll in a four-year degree university.

“Students living in rural areas of the United States achieve at lower levels and drop out of high school at higher rates than do their non-rural counterparts” (Roscigno & Crowley, 2001, p. 268). Roscigno and Crowley shared that this is a disproportionate representation of high school dropouts and has been linked to the poverty level of families in the rural areas of the United States. A strong relationship exists between SES with students from low-income families and dropout risks when compared to middle

income students (Christle, Jolivette, & Nelson, 2007). The annual household income of families in rural areas was, on average, \$8000 below non-rural areas, which has contributed to the types of employment available due to the level of education of parents and job market availability in rural areas. Family resources have a positive effect on the outcome of student success (Henry, Cavanagh, & Oetting, 2010; DeYoung, 1993).

The transition outcome is even more bleak for rural students with disabilities. The educational attainment for students identified with disabilities is less than that of those without disabilities. Not only are they more likely to drop out of high school, they typically have less desire to pursue postsecondary training and often have more difficulty obtaining employment (Irvin et al., 2011; Phelps & Hanley-Maxwell, 1997). Students identified with a disability struggle in the obtainment of a high school diploma, enrollment in postsecondary training, and employment; they also are much more likely to experience periods of unemployment when compared to their peers without disabilities (Phelps & Hanley-Maxwell, 1997).

Rural students with disabilities are less likely to plan for their future beyond high school, when compared to their peers without disabilities (Irvin et al., 2011). In today's economy, many high school graduates struggle with entering the adult world and face challenges, whether with some type of postsecondary education/training or entering directly into the workforce. One population that struggles more than others is that of students identified with disabilities who exit high school. These students have spent much, if not all, of their educational experience with supports and modifications that typically do not follow them past high school (Individuals with Disabilities Education Act, 2004; Americans with Disabilities Act, 1990). Though many agencies are available

to support these youth as they exit high school, it may be difficult for students to access or navigate this assistance, as up to this point, services have been provided without much personal involvement.

In addition to the differences previously explained, evidence indicates that many factors differ between rural and urban school districts and impact postsecondary outcomes when examining students with disabilities (Pennington, Horn, & Berrong, 2009). SES, school funding, population of schools, teacher salaries, and resources are a small selection of those factors. Research that explores the postsecondary outcomes of youth from both rural and urban areas is available, but research is scarce that explores the same relationship with a focus on students with disabilities.

Conceptual Underpinning for the Study

Because students with disabilities in rural areas have a lower postsecondary positive outcome rate, they have less opportunities to observe positive outcomes; be influenced by those positive outcomes; and, therefore, do not obtain the self-regulation processes to help promote successful postsecondary outcomes (DeYoung, 1993). The theoretical framework for this study is based on social learning theory and self-efficacy in society. The emphasis of social learning theory is the human mind's ability to observe, obtain influence, and assign self-regulation processes to those experiences (Bandura, 1977). Bandura (1995) also stated that a "youth's beliefs in their personal efficacy to manage life demands affect their psychological well-being, their accomplishments, and the direction their lives take" (p. ix). Development of self-regulation processes and self-efficacy are interchangeable in this area. Students with poor self-efficacy lack the internal motivators to promote success. For instance, rural students identified with a

disability are less likely to have a goal to attend any training after high school (Irvin et al., 2011). They rely heavily on external influences. If the external influences are persistently negative, or at least not positive in nature, then the outcomes will continue to decline. Today's economic condition continues to worsen from the top down. The government is in debt, down to the poorest of the poor having little, if any, personal property that is owned outright. Unemployment is high, and the availability of jobs is on the decrease. Since 2004, the number of unemployed has climbed from 75,956 individuals to 91,455 in January of 2014. The unemployment rate has gone from 5.5 in 2004 to 6.6 in January of 2014 (U.S. Government Printing Office, 2014). The under employed are taking jobs that previously had been available to high school graduates. These are all examples of negative influences experienced by youth exiting their secondary education institutions.

Some assumptions were made for the purpose of this study. It was assumed that all students who exit high school either want to obtain employment, enroll in school or training, or both obtain a job and enroll in school or training. It also was assumed that all rural, suburban, and urban areas are similar. And third, exit populations were assumed to be similar across all areas in relation to disability categories for those students who exited with a diploma or dropout method.

Statement of the Problem

Substantial evidence indicates that many factors differ between rural and urban school districts (Pennington et al., 2009). SES, school funding, population of schools, teacher salaries, and resources are a small selection of factors that have been explored. Research on the postsecondary outcomes of youth from both rural and urban areas also is

available, but very little explores the same relationship with a focus on students identified with disabilities. The 2012 Census Bureau report stated that 19% of the population, or 1 in 5, in the United States have a disability (U.S. Census Bureau, 2012). The Individuals with Disabilities Education Act recognizes the following thirteen categories of disability: developmental delay, mild mental disability, functional mental disability, autism, other health impairment, orthopedic impairment, specific learning disability, hearing impairment, vision impairment, emotional disability, speech and language impairment, traumatic brain injury, and blindness (Individuals with Disabilities Education Act, 2004). The data in this study consisted of individuals identified with one or more of the thirteen disabilities listed. More attention needs to be extended to explore factors that are exceptional to the population of citizens with disabilities. When students with disabilities exit high school, they immediately are faced with the same difficulties as any student who exits high school in addition to any additional barriers they face due to their unique disability. Urban and suburban areas consist of higher populations, businesses, and services compared to rural areas. Consequently, fewer agency services are available in rural areas to assist individuals with disabilities in meeting their unique needs. Measures need to be taken to address these differences in order to assist more individuals with disabilities in gaining meaningful employment. While not unique in this need, Kentucky is used for the focus of this study.

Purpose of the Study

This study is designed to explore the extent of the relationship of geographic classification and the postsecondary outcome for students with disabilities in Kentucky. The findings will provide insight into further research needs and propose possible

solutions that can help to negate these disadvantages, possibly increasing the postsecondary success rates for students with disabilities in rural Kentucky school districts.

Research Questions

General Research Question A: To what extent does the exit status of students with disabilities from each of the classifications of rural, suburban, and urban areas influence postsecondary outcomes?

1. To what extent does a student's exit status of dropout influence the postsecondary outcome?
2. To what extent does a student's exit status as earning a general diploma influence the postsecondary outcome?
3. To what extent does a student's exit status as a certificate/age out influence the postsecondary outcome?

General Research Question B: To what extent does the classification as rural, suburban, and urban influence the postsecondary outcomes for students with disabilities?

1. To what extent does the rural, suburban, and urban status of an area influence the probability of gaining competitive employment?
2. To what extent does the rural, suburban, and urban status of an area influence the probability of postsecondary education/training?
3. To what extent does the rural, suburban, and urban status of an area influence the probability of both postsecondary education/training and gaining competitive employment?

4. To what extent does the rural, suburban, and urban status of an area influence the probability of neither postsecondary education/training nor gaining competitively employment?

Definition of Key Terms

Key terms used in this document are based on education and sociology terminology. The term *transition* is used to discuss the challenges faced by adolescents as they move from the educational system into adulthood. Enrolling in further schooling or training, entering the workforce, becoming a parent, accessing agency supports, and living independently are some examples of factors that are included under the term *transition* (Shogren & Plotner, 2012).

The term *disability* is a reference to any condition that adversely affects a student's performance on a consistent basis on which they are performing significantly below their peers. Multiple categories of eligibility, from mild to severe, under Kentucky guidelines qualify as an educational disability. Any individual who meets the eligibility guidelines for a given disability is then offered services through a special education program in which they experience fewer barriers to their learning (Kentucky Administrative Regulation, 2008).

Postsecondary indicates the period after exiting high school; therefore, the term *postsecondary outcome* refers to the result of exiting. Information from Kentucky's Postsecondary Outcome Study is used in this research, whereby data are collected through a Youth One Year Out survey (YOYO). The purpose is to determine the percent of students identified with disabilities who exited high school and were "1) Enrolled in higher education within one year of leaving high school; 2) Enrolled in higher education

or competitively employed within one year of leaving high school; 3) Enrolled in higher education or in some other postsecondary education or training program or competitively employed or in some other employment within one year of leaving high school” (www.kypso.org). In individuals method of exit from high school was also included in this study. The term *general* diploma indicates that the individual exiting high school earning a general education diploma that can be used to gain entrance to a postsecondary institution or gain employment. The *certificate* method of exit indicates that the student exiting high school earning a certificate of completion. Typically this method of exit is reserved for students with more severe disabilities. A certificate cannot be used to enroll in a postsecondary institution and is not considered to be a diploma. The term *poverty* means being in a state of financial burden. When the term *poverty* is applied in this study, the U.S. Census data are used to judge poverty level or SES (U.S. Census Bureau, 2012).

The terms *non-rural* and *urban* will be considered interchangeable. Beale Codes is the rural-urban continuum code system used by the United States Department of Education for classification of areas. The codes will be used to classify areas of Kentucky as rural, suburban, and urban (U. S. Department of Agriculture Economic Research and Service, 2013).

Summary

Becoming a successful contributor and consumer to society is the ultimate goal for all youth as they exit high school. While laws exist to guide the educational systems to help all students meet that goal, some still fail to meet that mark. This study explores factors such as demographics, financial situation, and resources that impact the level of

success experienced by students with disabilities once exiting high school in rural areas, as compared to urban areas in Kentucky.

CHAPTER II: REVIEW OF THE LITERATURE

Students identified with disabilities face more barriers when exiting high school than those without disabilities (Irvin et al., 2011). Federal guidelines are in place in an attempt to reduce the impact of those barriers (No Child Left Behind, 2011). Research is abundantly available to illustrate the countless differences between rural and urban high schools (Pennington et al., 2009; Roscigno & Crowley, 2001, Roscigno, Tomaskovic-Devey, & Crowley, 2006; Stanley et al., 2007) relating to students with disabilities exiting from high school in rural schools when compared to those exiting urban schools (Edgar, 1985; Ulrich, 2011).

Social learning theory states that an individual's behavior can be shaped by the environment, experiences, and observations in life (Bandura, 1977). From this theory, it can be concluded that the environment, experiences, and observations in rural areas differ from those in urban areas. Therefore, social learning theory suggests that environment can influence individuals to behave differently and make different choices based on the geographic location in which they reside. In addition, Powell, Pierce, Nolan, & Fehringer's (2012) study supports that school culture plays a large role in influencing the students' transition outcome.

Non-empirical articles are included in this review if: (a) they addressed the rural to urban school district differences, (b) they addressed the impact of SES on student success, (c) they addressed geographic classification and postsecondary status for students with or without disabilities, and (d) they were published in the last 35 years. An attempt to include only articles from the last decade provided inadequate information, as this area has not been highly researched. An Internet search was conducted using

EBSCOhost, PsychInfo, and ERIC databases with the following terms: postsecondary outcome and students with disabilities, rural and urban school differences, and socioeconomic status and postsecondary outcome. The search yielded four articles that explored postsecondary outcomes for students with disabilities and six that explored the geographic classification and SES of an area in relation to school outcomes. These articles were utilized to establish past research and to indicate any relationship between postsecondary outcome and the geographic classification of an area.

A literature review was conducted to investigate studies that have examined the differences in characteristics between rural and urban schools, the impact of socioeconomic demographics on student success, and the relationship between geographic locations and postsecondary success rates for students identified with disabilities.

Rural and Urban School Differences

Rural and urban schools differ in many respects. Some of the key differences include the higher free and reduced lunch rate and the lower level of parent education in rural communities (Stanley et al., 2007; Roscigno & Crowley, 2001, Roscigno et al., 2006); inadequate funding (Roscigno & Crowley, 2001; Roscigno et al., 2006; Pennington et al., 2009); and the ability to obtain and retain expert staff (Pennington et al., 2009; Stanley et al., 2007). In a 2001 study by Roscigno and Crowley, data were obtained from the National Educational Longitudinal Survey and the Common Core of Data, to which hierarchical linear and logistic techniques were applied. These studies involved 25,000 students randomly selected from 1,000 middle schools. A standard mean comparison and t-test were used to explore the differences between family/school

resources in rural versus urban schools. In the Roscigno and Crowley study, the mean comparisons between rural and non-rural families and schools indicated that “rural families lag significantly behind non-rural families in income” (p. 279), which translates to an average of \$8,000 less in annual income.

A significant difference also exists in percent of students receiving free lunch, with 9.415% more students on the rural area list. The per-pupil expenditure also was reported in \$1,000 increments, at 4.404 in rural when compared to 5.144 for the non-rural area, which computes to approximately \$700 less per year (Roscigno & Crowley, 2001). One final finding of interest is the difference in average educational level of the parents in rural areas when compared to non-rural parents. Rural parents are much more likely to possess an education level that is less than non-rural parents (Roscigno & Crowley, 2001; Ulrich, 2011). A strong relationship between student outcome and parental income and educational level was found in the study by Roscigno and Crowley (2001) and also Roscigno et al. (2006). The findings support the current hypothesis that students with disabilities from rural schools do not fare as well as those from urban schools. While no direct research on students with disabilities was found in the Roscigno and Crowley study, it is well documented that students with disabilities face more barriers in education than those without disabilities (Edgar, 1985).

Pennington et al. (2009) conducted a study on the differences between rural and urban areas in relation to students with disabilities. The mixed method study consisted of 39 special education teachers from all levels of education. Of the 39 teachers, 19 were from rural areas. A 17-item survey of closed-ended inquiries was administered to determine resources available in the participants’ respective areas and their perspectives.

The survey instrument was reviewed by experts and deemed acceptable for the data that were sought. In addition to the quantitative data received from the survey instruments, the researchers selected representatives from both rural and urban schools, in which they had previously worked, to conduct interviews and obtain topographical data. It was determined that the selected schools were a fair representation of their identified category of rural or urban. In spite of the researchers' personal experiences with those interviewed, which could affect the validity and reliability of the study, it was determined that the obtained insight outweighed the concern. The population density of the area and number of students with disabilities were significantly lower in rural than in urban schools. Urban school districts served their students with disabilities with a teacher-to-student ratio of 1:8; the rural school district ratio was 1:5.

A second key difference between rural and urban schools was the proximity to institutions of higher education. A greater distance increased the difficulty for student access to higher education. The districts also struggled with recruiting new teachers, accessing professional development, and gaining opportunities to participate in research studies that could directly benefit their populations. Finally, a discrepancy was found in staff compensation. The rural district average starting salary was found to be approximately \$30,000 and could increase to approximately \$52,000 with advance degrees and experience. In comparison, the urban district starting salary was reported as approximately \$33,000 and could increase up to approximately \$70,000 with the same advances acquired as the rural example given. While the starting salaries do not display a significant discrepancy, the potential for increase in salary is significant. Thus, rural school districts experience challenges in retaining highly-qualified experienced teachers.

An additional finding from the teacher interviews indicated that rural schools accessed outside agencies and resources in the community 27% less than those in urban areas; e.g. urban school districts reported access to respite care and vocational and behavioral services more than the rural school districts. Rural districts also reported that, due to the smaller number of businesses, lack of public transportation, and increased competition for employment opportunities, they struggled with providing adequate vocational training opportunities for students with disabilities. This was not reflected in the urban school districts. Both rural and urban teachers typically serve the same number of students; however, rural teachers reported that they received two-thirds less in annual classroom funds when compared to the amount allotted to urban school teachers (Pennington et al., 2009).

Research from the Pennington et al. (2009) study mirrored the results of the Roscigno and Crowley (2001) and Roscigno et al. (2006) research, although it directly referenced students with disabilities. The Pennington et al. (2009) study was selected to make the connection from the Roscigno and Crowley and Roscigno et al. research to indicate that students with disabilities were found to experience significant barriers when attending schools in rural areas, compared to attending schools in urban areas. The findings directly reflect the research hypothesis expected at the completion of this study.

Again, Stanley et al. (2007) conducted research on differences between rural and urban schools, and the findings were consistent with those of Roscigno and Crowley (2001) and Pennington et al. (2009). An intercorrelation of variables was used to analyze the data collected through surveys. “Parental education and income were both significantly greater in more urban areas,” and “the percentage of free and reduced

lunches is greater in more rural areas while the size of the schools is significantly smaller in rural and medium rural communities” (Stanley et al., 2007, p. 230). It also was determined that the free and reduced lunch rate was negatively related to school performance. No significant differences were found between school adjustment and the rural and urban status of a community, but the limitation of excluding metropolitan schools could be responsible for this exclusion. This research was included because, again, it noted the key differences of SES, parent education and income levels, and resources in the economic climates of rural communities. Following this further, the current study reflects these three key factors.

While Karpinski, Neubert, and Graham (1992) explored rural schools, this study’s focus was based on the postsecondary outcome and dropout rates for students with disabilities and consisted of 86 students with disabilities from a specific rural area. The community that was selected was identified as a primarily rural school district with a total enrollment of 12% for students identified with a disability. Ninety-nine students were contacted, and 86 responded to the interviews. School records were reviewed, and two telephone interviews were included that were conducted after the student’s exited high school by either graduating or dropping out. As participants had graduated at various times, a chi-square(X^2) analysis was used to establish no differences between the two groups. Participants were placed into groups based on their method of exit from high school, graduate or dropout, and research was acquired to determine any key differences. Results revealed that graduates earned close to five times more vocational credits than dropout students, and dropout students were more likely to be enrolled in a culinary arts vocational program than any other available program. Students who were able to gain

work experience while in school were less likely to drop out. At the time of both interviews, the two groups were not statistically different in terms of employment, with 81% of graduates and 65% of dropouts at the first interview and 77% of graduates and 61% of dropouts at the second interview. The small sample size that was restricted to one location might account for the lack of a significant difference. The groups consistently reported working between 39-40 hours per week, indicating no significant difference between groups for hours of work per week. A difference was noted in the average wage between the two groups. Graduates' average salaries were recorded as \$5.78 an hour, and the dropout group reported \$4.91 an hour. This gap was closed at the time of the second interview, as the graduates reported an average wage of \$5.72 an hour, and the dropouts earned \$5.31 an hour. Data also supported that students with disabilities were more likely to be employed than seek continuing education or training due to the nature of rural communities and the resources available.

The final conclusion of the Karpinski et al. (1992) study illustrated that students with disabilities in rural areas were highly likely to find full-time competitive employment. This is in contradiction to the proposed hypothesis; however, it is believed that this study limited the results due to the participation of only one school district from a rural area with a population of only 86 students. Conversely, and perhaps more important, three of the four literature reviews found that rural and urban schools displayed significant differences. One key difference was SES and geographic location of the population of students, both of which are explored in the following sections.

The Impact of Socioeconomic Status on Student Success

The common focus of much empirical research has been on inner city poverty and the link to unsuccessful outcomes for students exiting high schools in those areas.

Recently, the focus has shifted to the poor rural areas and student success once exiting high schools. The free and reduced lunch rates, poor parental education, and employment market are three factors that hinder students beyond high school in rural areas.

In a closer analysis of the means by which students with disabilities cope after leaving high school from rural areas, O'Connor and Spreen (1988) found a significant correlation between the SES of parents and the postsecondary outcomes of their students. In essence, the higher the SES of the parents, the more likely that a student will enroll in postsecondary continuing education or become gainfully employed. The study consisted of 226 participants, 175 of whom were students with disabilities, and 51 served as a control group not identified with disabilities. Each group was proportional in gender, age, and SES to ensure accuracy of data collected. Parents and students were interviewed separately-students at the approximate age of 18.5 and again at the average age of 25. The study was limited to the father's employment and education level, unless the student was in a single mother home, at which time the mother's information was substituted for the father's information. As the O'Connor and Spreen study included all levels of SES represented in a typical rural area, the hypothesis is supported that students identified with disabilities from rural areas face barriers that hinder their postsecondary outcomes. Additional research was recommended to determine whether the correlation continues to urban areas as well.

Historically, individuals who continue their education past high school tend to have the potential for a higher income than their counterparts who enter the workforce without further training or education. Clasemann (2012) explored the factors that impact postsecondary school enrollment patterns for rural high school students. While this research targeted all students in general, the findings can reflect opportunities and trends for students in rural areas. Clasemann's research applied the data from the National Center for Education Statistics and the National Education Longitudinal Studies to those that were collected through surveys and interviews. The initial population consisted of both public and private schools, with a total of 24,600 students. The study explored the student achievement and school, program, and family characteristics to determine the existence of a relationship. Due to the length of the study and an inability to maintain contact with all students, the numbers declined by approximately half before completion of the 12th year. This missing data is a limitation of the study, as it could not be controlled. In brief, the findings of the research indicate that the highest SES was from the suburban schools, rural schools were more likely to be smaller and have a significantly lower than average funding level, suburban area teacher salaries were higher, and rural students were significantly less likely to seek postsecondary education or training than urban and suburban students.

The work of Samel, Sondergeld, Fischer, and Patterson (2011) investigated factors that impact the resilience and resistance in urban schools in response to graduation rates. The review of literature supports the belief that a strong connection exists between SES and low student performance and dropout rate. In addition, the parent education levels strongly influenced those outcomes (Samel et al., 2011; Ulrich,

2011). This case study examined a particular school in the reform process. A single class of students in grade 7 was followed to the expected year of graduation. The cohort model was applied in order to exclude students who moved in and out of the class, thus skewing the data. Demographics were obtained from the school and included attendance, behavior, GPA, gender, ethnicity, special education status, and free-reduced lunch status. The free-reduced lunch status was used to identify the SES of the population. A 5-point Likert scale was utilized to determine classroom environment. Teachers were asked to complete the survey, and students were asked to complete a yearly survey on their plans for postsecondary, as well as a classroom environment survey.

Findings indicate that students in the on-time graduate (OTG) path included a smaller percentage of individuals identified with disabilities when compared with those on the alternate-time graduate (ATG) path. In addition, the OTG group was comprised of higher SES students. This study differed in results for using parental education level as a predictor to student success. As the study was conducted in a school with extensive interventions in place for reform, it implied that the lack of a relationship between parental education level and student success could be a direct result of positive interventions. Overall, SES was determined to be a predictor for student success post high school in the urban district that was observed (Samel et al., 2011). This translates to the SES impact in rural areas as well, which is particularly important, as research indicates that rural area schools have a lower average SES than urban area schools (Pennington et al., 2009; Ulrich, 2011).

Geographic Location and Postsecondary Success

Research regarding geographic location in relation to student success is a final area of importance. Pennington et al. (2009) stated, “The notion that there is a disparity between special education services in rural and urban school districts may be due in part to blaring geographic and demographic distinctions” (p. 5). Ulrich (2011) stated, “Although people from all types of rural communities generally have more education than their parents, those in chronically poor rural areas still have relatively low education levels — a disadvantage that persists across generations” (p. 1). The geographic location limited access to professional development, funding limited the access to resources, and the lack of non-school services available in rural areas all serve as challenges. Rural areas require more travel to metropolitan areas for services, and parents’ income is less than that of the non-rural areas (Stanley et al., 2008). The lack of public transportation inhibits individuals without personal transportation to travel to work, school, or interviews. Due to the unemployment rate, an increase also can be seen in higher qualified individuals who are seeking competitive employment positions that high school graduates would typically obtain as entry-level employment (Pennington et al., 2009).

Research by Roscigno and Crowley (2001) on the inequalities of education alleged that rural areas had no control of some factors due to embedded community history. They often operate with their own sub-culture model. The majority of the research reviewed those states in which schools with a lower average SES tend to include students with lower positive post high school outcomes (Baer et al., 2003; Seo, Abbott, & Hawkins, 2008; Stanley et al., 2008). McGranahan (1980) shared that location, as well as attributes, can contribute to income levels. The lack of mobility opportunities within

rural areas hinders the ability to gain access to meaningful employment and continued education. In addition, income inequality tends to be a larger issue in poorer areas. Rural communities also follow the status quo model (McGranahan, 1980). Schools also teach to the needs of the local community, which may limit the opportunities for those individuals. “Labor markets play a direct role in the investment decision because educators and school boards probably invest resources in accordance with the perceived needs of the local population and the demands of local labor markets” (Roscigno & Crowley, 2001, p. 272). This translates into a lower expectation for students, if the only labor force available for graduates is an entry-level position in a menial facility or business. Geography can have a significant impact on student success.

Summary

In the review of literature, key differences exist between rural and urban school districts. SES plays a strong role in predicting the postsecondary outcome of students from rural areas, as well as the geographic location. Students from rural areas face the challenge of rising above the situation in which they live in order to improve their postsecondary outcomes. Students with disabilities from the same rural areas face even more challenging situations complicated by their disabilities.

The literature reviewed indicates that geographic location places unique challenges on youth as they exit high school and leads to the need for further exploration of the impacts on the postsecondary status of students identified with disabilities. Specifically, this study was designed to consider the three exit statuses of dropping out, graduating with a general diploma, and exiting due to aging out/earning a certification of completion for each of the three geographic categories of rural, suburban, and urban of an

area in the state of Kentucky. This study also examined the relationship between the three geographic classification areas and the probability of (a) gaining competitive employment, (b) enrolling in postsecondary education/training, (c) both gaining competitive employment and enrolling in postsecondary education/training, or (d) neither gaining competitive employment nor enrolling in postsecondary education/training. This study sought to examine the relationship between geographic classification of an area and the postsecondary outcome status for individuals identified with disabilities in Kentucky. Table 1 provides a summary of all literature that was reviewed.

Table 1

Summary of Literature Reviewed

Citation	Research Question/Participants; Methodology	Findings
Roscigno & Crowley, 2001	<ul style="list-style-type: none"> -Do students in rural areas achieve at lower levels than students in non-rural areas? Does family poverty play a role? -25 8th-grade students from each of 1,000 middle schools. Excluded private schools. -Quantitative 	<ul style="list-style-type: none"> -Rural schools have a higher level of free and reduced lunch students. -Parents from rural area schools have a lower level of education on average. -Rural schools report less funding per school and up to \$700 less per pupil. - The income gap in rural compared to non-rural was \$8,000.
Karpinski, Neubert, & Graham, 1992	<ul style="list-style-type: none"> - Is there a difference in postsecondary outcomes of students with disabilities, graduates, and dropouts in the rural setting? -99 students were selected from the rural setting. - Mixed: Qualitative and quantitative 	<ul style="list-style-type: none"> -There is no difference in dropouts and graduates in terms of employment. -Students are more likely to be employed in general than enrolled in postsecondary school due to the nature of the rural community.
Pennington, Horn, & Berrong, 2009	<ul style="list-style-type: none"> - Is there a difference between big city and small town low incidence special education services? - Surveys were sent to specific schools without a random selection of the population. -Quantitative 	<ul style="list-style-type: none"> -The salary for teachers was less in the small town setting. -The types of services and resources differed between the settings. -The funding in the big city schools was higher than in the small town schools. -The number of staff in the big city schools was larger. -The number of students was consistent across the two groups. -Geographic location played a role in the differences.
Stanley, Comello, Edwards, & Marquart, 2007	<ul style="list-style-type: none"> - Is there a difference in school adjustment between rural and urban schools? - A national sample of 167,738 students in grades 7 to 12 from 185 communities within the contiguous U.S. between 1996 and 2000. 50% female, 78% White, 7% African American, 5% Mexican American. Metro communities were excluded due to difficulty in recruiting participation. -Qualitative 	<ul style="list-style-type: none"> -Rural areas have a higher rate of free and reduced lunch students. -The average level of parent education was less in rural areas. -Rural areas have fewer activities available for students. -Funding was less in rural areas. -Teachers in rural areas have less years of teaching experience. -There was no difference in size of the groups. -Geographic location played a role in the results.

Continued

Citation	Research Question/Participants; Methodology	Findings
O'Connor & Spreen, 1988	<ul style="list-style-type: none"> - What is the relationship between SES and postsecondary outcome for students with learning disabilities? -175 learning disabled students and 51 non-disabled students as the control group were selected with a matched gender, age and SES. - Quantitative correlation study 	<ul style="list-style-type: none"> -A significant correlation was found between the parents' socioeconomic level and the postsecondary outcomes of students with disabilities. -The higher the socioeconomic level of the parent, the higher the educational and occupational outcome of the student with disabilities.
Samel, Sondergeld, Fischer, & Patterson, 2011	<ul style="list-style-type: none"> - What factors impact resilience and resistance in urban reform schools in response to graduation? - Case study of urban school districts. -Longitudinal case study 	<ul style="list-style-type: none"> -On-time graduation group had less special education population than the alternative-time graduation group. -There was no difference found between race and socioeconomic levels of the three groups.
Clasemann, 2012	<ul style="list-style-type: none"> -Years 1988, 1990, 1992, 1994, & 2000; 820 public schools; 240 private schools of a national selection. Resulted in 24,600 students randomly selected. -Quantitative 	<ul style="list-style-type: none"> -Rural high school students were less likely to seek postsecondary education. -Rural high schools have a higher representation of lower SES students. -Geographic location played a part in the postsecondary enrollment decision for students.
Marshall, Powell, Pierce, Nolan, & Fehringer, 2012	<ul style="list-style-type: none"> -Is there a difference in transition outcomes for students in non-traditional schools in Kentucky? -2007-2008 school year, 105 non-traditional A6 schools, 19,497 students. -Mixed qualitative and quantitative 	<ul style="list-style-type: none"> -Demographically, these students are at the highest risk for limitations. -Youth in these programs made it known that they appreciated the assistance and sought out opportunities for assistance. - Transition was defined as successfully exiting the A6 non-traditional educational setting, as opposed to the typical definition of planning for postsecondary aspirations in adulthood. -These youth were challenged with disabilities, poor academic performance, and troubled histories. -School culture played a large role in influencing the students' transition outcome. -Lack of transition programming negatively impacted the outcomes.

Citation	Research Question/Participants; Methodology	Findings
Christle, Jolivet, & Nelson, 2007	<p>-Is there a relationship between school characteristics and student outcome data related to dropout rates in Kentucky?</p> <p>-Grades 9-12 for two consecutive years were selected that resulted in 196 high schools. Data were provided from the Kentucky Department of Education.</p> <p>-Quantitative</p>	<p>-A significant negative relation was found between dropout rate and academic achievement, school attendance rate, rate of successful transition to adult life, and percentages of students of White ethnic background. Gender, school size, and expulsion rates had no correlation.</p> <p>-Schools reporting high dropout rates differed significantly from schools reporting low dropout rates.</p>
Baer, Flexer, Beck, Amstutz, Hoffman, Brothers, ... Zechman, 2003	<p>-How are student characteristics related to transition service utilization and postsecondary outcomes? What program and student-related variables best predicted full-time employment and postsecondary education after graduation? What were the costs and benefits of using transition coordinators to conduct follow-up studies of special education graduates?</p> <p>-A committee of four transition coordinators, a university consultant, and the coordinator of the Special Education Regional Resource Center developed the methods. Selected students who exited from 1997 and 2000 and received more than only speech services. Dropout students were excluded from this research. Students were randomly selected and a phone survey was conducted. Urban 80% minority, suburban district was 10% minority and rural was 2% minority. Overall, 20% minority for the total schools studied.</p> <p>-Quantitative study and correlation analysis</p>	<p>-Number of years since graduation showed no significant relationship.</p> <p>-Participation in career fairs and resume writing was negatively correlated with positive postsecondary outcomes.</p> <p>-Female gender displayed a significant negative relationship with full-time employment post high school, participation in jobs while in high school, vocational education, and work study.</p> <p>-Minority status also was negatively related to enrollment in postsecondary education.</p> <p>-Rural school graduates had more in-school jobs and were more involved with extracurricular activities and career planning activities.</p> <p>-Urban school graduates were less likely to have in-school jobs and less likely to be involved in extracurricular activities and career planning activities.</p> <p>-Suburban graduates were significantly more likely to have more vocational education training and less job shadowing and career planning activities.</p> <p>-Special education outcomes are related to the school settings.</p>

CHAPTER III: METHODOLOGY

Researchers have explored relationships between rural and urban schools in the American educational system. Rural and urban school districts differ in many ways, such as the free and reduced lunch rates (Stanley et al., 2007); school experiences (Clasemann, 2012); dropout rates (Irvin et al., 2011; Phelps & Hanley-Maxwell, 1997); and achievement level (Roscigno & Crowley, 2001). High school graduates face many barriers as they exit school, and those barriers increase for students with disabilities (Irvin et al., 2011). This study explored whether a significant relationship exists between rural classification and postsecondary outcomes for youth with disabilities. The study focused particularly on the employment status and the postsecondary training or education status for students with disabilities from rural, suburban, and urban areas across the state of Kentucky.

Research conducted by Stanley et al. (2007) found that the free and reduced lunch rate of rural areas was higher than in urban areas, which resulted in a negative relationship in student academic performance. A student who demonstrates poor academic performance is less likely to earn acceptance into postsecondary institutions (Clasemann, 2012). Clasemann's study also found that the SES level of an area directly impacts a student's success, and rural areas are more likely to consist of lower SES individuals. Therefore, the rural status of an area can have a direct impact on the success of graduates.

Roscigno and Crowley (2001) shared that a disproportionate representation of high school dropouts has been linked to the poverty level of families in the rural areas of the United States. The annual household income of families in rural areas is, on average,

\$8000 below non-rural areas. The level of family resources also plays a key role in positive postsecondary outcomes for students exiting high school (Henry et al., 2010; DeYoung, 1993).

The educational attainment for students identified with disabilities is less than that of those without disabilities. Not only are they more likely to drop out of high school, they typically have less drive to pursue postsecondary training and often have more difficulty obtaining employment (Irvin et al., 2011; Phelps & Hanley-Maxwell, 1997). Students identified with a disability struggle in the obtainment of a high school diploma, enrollment in any postsecondary training, and employment; they also are much more likely to experience periods of unemployment when compared to their peers without disabilities (Phelps & Hanley-Maxwell, 1997).

All students exiting high school are met with unique challenges that occur when entering the adult world. Students identified with a disability struggle with transition from high school more than their peers without disabilities (Irvin et al., 2011). When students identified with a disability exit high school, they lose a tremendous amount of support that has, up to that point, been navigated by adult providers. Upon exiting, they are faced with the task of learning to independently navigate the greatly reduced level of supports available. Many lack the ability to self-navigate the support systems. Individuals who live in rural areas also experience more disadvantages than those who live in urban areas.

Research Design

This study utilized correlational research and descriptive statistics. Correlation research is a statistical research method whereby the relationship between two or more

variables is examined and identified (Wiersma & Jurs, 2009). Those relationships are then used to determine the existence of a suggestion on whether one or more variables may predict another variable. Descriptive statistics and a Pearson's Chi Square (X^2) were conducted to determine the extent of that relationship between all variables through Statistical Analysis Software (SAS).

The findings of this study will propose possible solutions that can negate these disadvantages and provide insight into further research needs, thus allowing the possibility of increasing the postsecondary success rates for students with disabilities in rural Kentucky school districts. Three categories of geographic locations are described in this study. In addition, three categories are described for postsecondary status of students identified with disabilities at one year after exiting secondary school.

Research Questions

General Research Question A: To what extent does the exit status of students with disabilities from each of the classifications of rural, suburban, and urban areas influence postsecondary outcomes?

1. To what extent does a student's exit status of dropout influence the postsecondary outcome?
2. To what extent does a student's exit status as earning a general diploma influence the postsecondary outcome?
3. To what extent does a student's exit status as a certificate/age out influence the postsecondary outcome?

General Research Question B: To what extent does the classification as rural, suburban, and urban influence the postsecondary outcomes for students with disabilities?

1. To what extent does the rural, suburban, and urban status of an area influence the probability of gaining competitive employment?
2. To what extent does the rural, suburban, and urban status of an area influence the probability of postsecondary education/training?
3. To what extent does the rural, suburban, and urban status of an area influence the probability of both postsecondary education/training and gaining competitive employment?
4. To what extent does the rural, suburban, and urban status of an area influence the probability of neither postsecondary education/training nor gaining competitive employment?

A quantitative investigation was conducted using information from the KDE Youth One Year Out Survey (YOYO) from 2011-2013 and the U.S. Census data. The study was organized by applying the USDA's Rural-Urban Continuum Codes (Beale Codes), which was most recently updated in 2013. The codes are designed to identify counties as metropolitan and non-metropolitan, while breaking down each into one of nine categories by population size, adjacency to metro areas, and degree of urbanization (U. S. Department of Agriculture Economic Research and Service, 2013). This classification system allows for researchers to examine data by specific groupings as needed. Specific classifications for this study were determined as: 1-3 = urban, 4-6 = suburban, and 7-9 = rural. Data from the YOYO Survey were divided into the three categories, and three sequential years were selected to show consistent data across years. Data prior to 2011 were not collected in the same manner and, therefore, excluded from the study. Descriptive statistics and a Chi-square (χ^2) were utilized to establish whether

a relationship exist between variables. The data for the rural, urban, and suburban areas were analyzed over a three-year period to determine whether a significant pattern exist. Each year also was examined individually to determine whether one year is statistically different than the others.

Four categories of postsecondary outcome status were explored, (1) competitively employed, (2) enrolled in postsecondary school/training, (3) both competitive employment and school/training, and (4) neither competitive employment nor school/training. A postsecondary status of competitively employed indicates work performed by an individual with a disability in an integrated setting at minimum wage or higher, and at a rate comparable to non-disabled workers performing the same tasks. A postsecondary status of School indicates that the student is either currently enrolled or was enrolled in some type of postsecondary training, institution, or university that results in a certificate, degree, or diploma upon completion of the program of study. A postsecondary status of both indicates that a student is competitively employed and either currently enrolled or was enrolled in a postsecondary program at some point since exiting high school. A postsecondary status of neither indicates that the student is neither competitively employed nor has enrolled in a postsecondary training program since exiting high school. These students might be working in non-competitive employment, supported employment, sheltered workshops, in medical care settings, adult daycare programs, or living at home without any employment or training.

Population Sample and Data Sources

Data for this study were obtained from the Kentucky's Youth One Year Out (YOYO) Survey from the 2011-2013 reporting years. The Kentucky Department of

Education, along with the Human Development Institute at the University of Kentucky, granted permission to use the data provided in the aggregated format. (See permission letter in appendix).

Instrumentation/Measures/Protocols

The YOYO Survey was designed by the Kentucky Department of Education/Division of Learning Services (KDE/DLS) to address the Federal Department of Education requirement that special education departments follow up with students who had Individual Education Plans (IEP) to determine whether they are enrolled in postsecondary education, employed, both employed and in postsecondary education, or neither employed nor in postsecondary education. The Western Kentucky University Human Subjects Research Review Board approved the use of the aggregated data provided by the Kentucky Postsecondary Outcome Study (KyPSO) that was obtained through their survey. In the initial survey, students were contacted by an employee from the secondary institution from which they exited in the spring of the year following their graduation or exit. The survey asked a variety of questions including current educational status, employment status, and information on the quality of life since leaving the secondary institution. Choices included working for pay, working without pay, enrolled in postsecondary training/education, or not enrolled in postsecondary training/education.

Procedures

The Kentucky Department of Education and the Human Development Institute of the University of Kentucky were contacted to obtain permission to use the data from the YOYO survey, as the survey is a live, online intelligent survey with branching logic. Access to the survey is available only to the interviewers for the short window during

which the survey is to be conducted. Each interviewer participates in an annual training to ensure their status as a standardized interviewer. The contact from the Human Development Institute of the University of Kentucky requested the research questions, then used to create Table 2 presented in aggregated format.

A chi-square (X^2) statistical test was applied to determine whether a relationship between geographic classifications of areas and each variable for the following categories existed: (a) dropout exit status, (b) earned a general diploma exit status, (c) earned a certificate/aged out exit status, (d) enrolled in postsecondary training, (e) competitively employed, (f) both competitively employed and enrolled in postsecondary training, and (g) neither employed nor enrolled in postsecondary training. This analysis was conducted on three consecutive years of data. The chi-square (X^2) statistical test was conducted to determine the association between each of the variables for all of the years 2011-2013 combined. A positive significant relationship in the statistical test will indicate a significant influence between the rural to urban classification and the postsecondary outcome status of individuals and student exit status.

Table 2

Aggregated Data Supplied from KY Postsecondary Outcome Center

2013	Dropout	Gen Diploma	Certificate / Aged Out	Competitively Employed	School	Both	Neither
Rural (n = 862)	6.73% (58)	83.53% (720)	9.76% (84)	41.88% (361)	30.05% (259)	12.99% (112)	40.95% (353)
Urban (n = 1107)	7.14% (79)	79.77% (883)	13.09% (145)	47.70% (528)	40.47% (448)	19.15% (212)	30.53% (338)
Suburban (n = 635)	10.24% (65)	80.79% (513)	8.97% (57)	46.77% (297)	26.93% (171)	12.60% (80)	38.43% (244)
Statewide	7.76% (202)	81.26% (2116)	9.91% (258)	45.55% (1186)	33.72% (878)	15.51% (404)	35.91% (935)
2012	Dropout	Gen Diploma	Certificate / Aged Out	Competitively Employed	School	Both	Neither
Rural (n = 853)	6.79% (58)	83.61% (714)	9.6% (82)	44.15% (377)	29.78% (254)	11.71% (100)	37.47% (320)
Urban (n = 1257)	7.95% (100)	78.38% (986)	13.67% (172)	45.95% (578)	41.21% (518)	19.48% (245)	32.19% (405)
Suburban (n = 626)	6.55% (41)	82.27% (515)	11.18% (70)	52.08% (326)	27.64% (173)	14.7% (92)	34.82% (218)
Statewide	7.27% (199)	80.9% (2215)	11.83% (324)	46.79% (1281)	34.54% (945)	15.96% (437)	34.44% (943)
2011	Dropout	Gen Diploma	Certificate / Aged Out	Competitively Employed	School	Both	Neither
Rural (n = 867)	4.96% (43)	85.47% (741)	8.19% (71)	39.1% (339)	23.99% (208)	7.38% (64)	44.18% (383)
Urban (n = 977)	6.14% (60)	80.14% (783)	13.41% (131)	36.71% (359)	31.12% (304)	11.15% (109)	43.25% (423)
Suburban (n = 621)	6.6% (41)	84.38% (524)	8.54% (53)	39.39% (245)	22.54% (140)	8.2% (51)	45.82% (285)
Statewide	5.84% (144)	83.08% (2048)	10.34% (255)	38.22% (943)	26.45% (652)	9.08% (224)	44.22% (1091)

Note. Total number students reported in parentheses. Dropout = exited school by dropping out; Gen Diploma = exited earning a general education diploma; Certificate/Aged Out = student exited from school earning a certificate of completion due to non credit earning school path that is designed for students with moderate to severe disabilities; Competitively Employed = employed at a job with competitive wages and benefits; School = enrolled in either a training program or school beyond 12th grade; Both = both employed and school; Neither = neither employed nor in school.

CHAPTER IV: RESULTS

This study examined the three exit statuses of dropout, graduating with a general diploma, and exiting due to aging out/earning a certification of completion for each of the three categories of rural, suburban, and urban Geographic classification of an area in the state of Kentucky. This study also considered the relationship between the three geographic classification areas and the probability of (a) gaining competitive employment, (b) enrolling in postsecondary education/training, (c) both gaining competitive employment and enrolling in postsecondary education/training, or (d) neither gaining competitive employment nor enrolling in postsecondary education/training.

This chapter presents the data in six formats: (a) descriptive statistics presented with a chi square (X^2) to determine if there is a significant difference in postsecondary outcomes between geographic classifications (see Tables 3 and 4), (b) exit data for each year subdivided by geographic classification and postsecondary outcome (see Table 5), (c) geographic classification and postsecondary outcome data for all three years combined without the method of exit (see Table 6), (d) the combined three-year geographic classification data subdivided by method of exit and postsecondary outcome (see Table 7), (e) data for all three years and geographic classifications combined subdivided by method of exit and postsecondary outcome (see Table 8), and (f) postsecondary outcome data organized by year without any further subdivision (see Table 9). The paragraph preceding each table provides a summary and the significance of that table.

Data Analysis

A review was conducted of the descriptive statistics to determine whether the data was complete. In order to run descriptive statistics, 55 cells were removed from the supplied data due to missing information. Nine cells were eliminated, as no data was present. Twenty-six cells were eliminated due to lack of geographic classification assigned, and 20 cells were eliminated due to an absence of exit codes. The sample size of 7835 was reduced to 7780 for the combined three years.

Table 3 provides the statistics for all three years combined and divided by the postsecondary outcome and the geographic classification. The frequency, percentage, row percentage and column percentage indicate that the data are complete and free of any problem cells. The population of students with a postsecondary outcome of competitive employment from rural was 758, suburban was 609, and urban was 854; totaling 2221 and representing 28.55 percent of the students in the entire study population. The number of students with a postsecondary outcome status of school or training was 1536, representing 19.74% of the total population sample. Of the total population, 1185 students, or 15.23% reported a postsecondary outcome status of both competitive employment and school or training. A total of 2838 students, or 36.48% indicated they were neither competitively employed nor enrolled in school or training programs. The total population sample consisted of 7780 students, with 100% total for both row and column categories.

Table 3

Descriptive Statistics Postsecondary Outcomes by Geographic Classification

		Rural	Suburban	Urban	Total
Comp Employed	F	758.00	609.00	854.00	2221.00
	P	9.74	7.83	10.98	28.55
	RP	34.13	27.42	38.45	
	CP	29.49	32.46	25.61	
School		483.00	287.00	766.00	1536.00
		6.21	3.69	9.85	19.74
		31.45	18.68	49.87	
		18.79	15.30	22.98	
Both		317.00	258.00	610.00	1185.00
		4.07	3.32	7.84	15.23
		26.75	21.77	51.48	
		12.33	13.75	18.30	
Neither		1012.00	722.00	1104.00	2838.00
		13.01	9.28	14.19	36.48
		35.66	25.44	38.90	
		39.38	38.49	33.11	
Total		2570.00	1876.00	3334.00	7780.00
		33.03	24.11	42.85	100.00

Note. F = Frequency; P = Percent; RP = Row Percent; CP = Column Percent; Comp Employed = employed at a job with competitive wages and benefits; School = enrolled in either a training program or school beyond 12th grade; Both = both employed and school; Neither = neither employed nor in school.

Table 4 contains a comparison of the postsecondary outcome status and geographic classification. A chi-square (X^2) analysis was performed to determine the existence of a significant difference between the comparison groups. As presented in Table 4, the results indicate a significant relationship between postsecondary outcome status and geographic classification for 2011-2013, $p < .05$.

Table 4

Relationship of Postsecondary Outcome to Geographic Classification

Statistic	DF	Value	Prob
Chi-Square	6	114.2690	.0001
Likelihood Ratio Chi-Square	6	114.8882	.0001
Mantel-Haenszel Chi-Square	1	0.6202	0.4310
Phi Coefficient		0.1212	

Table 5 provides data for each year across all geographic classification areas and presents the exit status of students from each year and geographic classification and the postsecondary outcome status. In 2011, the category of neither competitively employed nor enrolled in school (neither) revealed that 39.30% exited from rural geographic areas, 41.91% from suburban, and 36.86% from urban. The average row percent for the neither category was 38.99%, indicating individuals graduating from urban geographic area schools were less likely to fall into the neither category. This same trend repeated for years 2012 and 2013. The 2011-2013 data revealed that students from rural and urban area schools reported a higher percentage in the competitive employment category than the average for the year. Students from urban areas reported less than the average for the year. The opposite is true for the postsecondary status of enrolling in school or training. This relationship indicates that students from urban area schools were more likely to seek training or school once exiting high school when compared to peers exiting schools from rural and suburban areas.

Table 5

2011-2013 Exit Data by Year for All Classifications and Postsecondary Outcomes

Year	Area	Exit	Comp Empl		School/ Training		Both Empl and School		Neither Empl nor School		All	
			<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN
2011	Rural	Diplo	219	29.55	167	22.54	100	13.50	255	34.41	741	100
		Certif	6	8.45	9	12.68	1	1.41	55	77.46	71	100
		Drop	7	16.28	6	13.95	4	9.30	26	60.47	43	100
		All	232	27.13	182	21.29	105	12.28	336	39.30	855	100
	Subur	Diplo	146	27.86	102	19.47	81	15.46	195	37.21	524	100
		Certif	5	9.43	6	11.32	1	1.89	41	77.36	53	100
		Drop	7	17.07	7	17.07	4	9.76	23	56.10	41	100
		All	158	25.57	115	18.61	86	13.92	259	41.91	618	100
	Urban	Diplo	180	22.99	217	27.71	148	18.90	238	30.40	783	100
		Certif	11	8.40	31	23.66	2	1.53	87	66.41	131	100
		Drop	14	23.33	9	15.00	3	5.00	34	56.67	60	100
		All	205	21.05	257	26.39	153	15.71	359	36.86	974	100
	All 2011		595	24.32	554	22.64	344	14.06	954	38.99	2447	100
2012	Rural	Diplo	257	35.99	140	19.61	97	13.59	220	30.81	714	100
		Certif	5	6.10	9	10.98	-	-	68	82.93	82	100
		Drop	15	25.86	5	8.62	3	5.17	35	60.34	58	100
		All	277	32.44	154	18.03	100	11.71	323	37.82	854	100
	Subur	Diplo	214	41.55	69	13.40	87	16.89	145	28.16	515	100
		Certif	6	8.57	12	17.14	-	-	52	74.29	70	100
		Drop	14	34.15	-	-	5	12.20	22	53.66	41	100
		All	234	37.38	81	12.94	92	14.70	219	34.98	626	100
	Urban	Diplo	290	29.41	221	22.41	224	22.72	251	25.46	986	100
		Certif	13	7.56	38	22.09	8	4.65	113	65.70	172	100
		Drop	30	30.00	14	14.00	13	13.00	43	43.00	100	100
		All	333	26.47	273	21.70	245	19.48	407	32.35	1258	100
	All 2012		844	30.83	508	18.55	437	15.96	949	34.66	2738	100
2013	Rural	Diplo	233	32.41	128	17.80	105	14.60	253	35.19	719	100
		Certif	6	7.14	13	15.48	-	-	65	77.38	84	100
		Drop	10	17.24	6	10.34	7	12.07	35	60.34	58	100
		All	249	28.92	147	17.07	112	13.01	353	41.00	861	100

Continued

Year	Area	Exit	Comp Empl		School/ training		Both Empl and School		Neither Empl nor School		All	
			<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN
2013	Subur	Diplo	196	38.43	76	14.90	79	15.49	159	31.18	510	100
		Certif	6	10.53	7	12.28	-	-	44	77.19	57	100
		Drop	15	23.08	8	12.31	1	1.54	41	63.08	65	100
		All	217	34.34	91	14.40	80	12.66	244	38.61	632	100
		Certif	15	10.34	27	18.62	1	0.69	102	70.34	145	100
		Drop	18	23.68	9	11.84	8	10.53	41	53.95	76	100
		All	316	28.68	236	21.42	212	19.24	338	30.67	1102	100
		All 2013	782	30.13	474	18.27	404	15.57	935	36.03	2595	100
Total for all years			2221	28.55	1536	19.74	1185	15.23	2838	36.48	7780	100

Note. - indicates a population of zero; Diploma = exited earning a general education diploma; Certificate/Aged Out = student exited from school earning a certificate of completion due to non credit earning school path that is designed for students with moderate to severe disabilities; Drop = exited school by dropping out; All = all methods of exiting high school combined; Comp Empl = employed at a job with competitive wages and benefits; School/training = enrolled in either a training program or school beyond 12th grade; Both Empl and School = both employed and school; Neither Empl nor School = neither employed nor in school.

Table 6 consists of combined data for the three years in this study without regard for the student's method of exit from high school. Students exiting from high school were more likely to fall into the neither employed nor school category than any other, as evidenced by a row percentage of 33% or higher. The urban school district percentage of 33.11 was lower than the overall average of 36.48%. Rural and suburban school districts were above the overall average. The category that held the next highest percentage for all geographic classifications is the Competitive Employment category with an overall average of 28.55%. Both rural and urban districts were higher than the average, and the urban districts fell below the average, with 25.61%. Another key difference in the data between geographic classifications was the school/training category and the both employed and school category. Both were above the overall average, which accounts for the almost 3% differences in the competitive employment category and neither employed

nor school category. Graduates from suburban areas were more likely to obtain competitive employment than those from rural areas.

Table 6

Geographic Classification and Postsecondary Outcomes for Combined 2011-2013 Years

	Comp Empl		School/ Training		Both Empl and School		Neither Empl nor School		All	
Area	<i>n</i>	Row PctN	<i>N</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN
Rural	758	29.49	483	18.79	317	12.33	1012	39.38	2570	100
Subur	609	32.46	287	15.30	258	13.75	722	38.49	1876	100
Urban	854	25.61	766	22.98	610	18.30	1104	33.11	3334	100
All	2221	28.55	1536	19.74	1185	15.23	2838	36.48	7780	100

Note. Comp Empl = employed at a job with competitive wages and benefits; School/training = enrolled in either a training program or school beyond 12th grade; Both Empl and School = both employed and school; Neither Empl nor School = neither employed nor in school; Subur = suburban; Row PctN = row percent; *n* = total number reported.

Table 7 provides the same information but includes the methods of exit from high school. Across all three geographic classifications, students who exited with certificates of completion or dropout were more likely to fall into the neither employed nor school category. When the diploma method of exit was examined and compared across geographic classifications for the neither employed nor school category, rural was 33.49%, suburban was 32.21%, and urban was 25.81%. Graduates earning a diploma from rural and suburban school districts were significantly more likely to fall into the neither employed nor school category than those earning a diploma from urban school districts. In contrast, graduates earning a diploma from rural and suburban school districts were significantly more likely to gain competitive employment than those from urban school districts. Students who exited with a diploma from urban school districts are

significantly more likely to enroll in postsecondary school or training than suburban school district diploma graduates.

Table 7

Geographic Classification with Method of Exit and Postsecondary Outcome

Area	Exit	Comp Empl		School/ Training		Both Empl and School		Neither Empl nor School		All	
		<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN
Rural	Diplo	709	32.61	435	20.01	302	13.89	728	33.49	2174	100
	Certif	17	7.17	31	13.08	1	0.42	188	79.32	237	100
	Drop	32	20.13	17	10.69	14	8.81	96	60.38	159	100
	All	758	29.49	483	18.79	317	12.33	1012	39.38	2570	100
Subur	Diplo	556	35.89	247	15.95	247	15.95	499	32.21	1549	100
	Certif	17	9.44	25	13.89	1	0.56	137	76.11	180	100
	Drop	36	24.49	15	10.20	10	6.80	86	58.50	147	100
	All	609	32.46	287	15.30	258	13.75	722	38.49	1876	100
Urban	Diplo	753	28.42	638	24.08	575	21.70	684	25.81	2650	100
	Certif	39	8.71	96	21.43	11	2.46	302	67.41	448	100
	Drop	62	26.27	32	13.56	24	10.17	118	50.00	236	100
	All	854	25.61	766	22.98	610	18.30	1104	33.11	3334	100
Totals		2221	28.55	1536	19.74	1185	15.23	2838	36.48	7780	100

Note. Diplo = exited earning a general education diploma; Certif = student exited from school earning a certificate of completion due to non credit earning school path that is designed for students with moderate to severe disabilities; Drop = exited school by dropping out; All = all methods of exiting high school combined; Comp Empl = employed at a job with competitive wages and benefits; School/training = enrolled in either a training program or school beyond 12th grade; Both Empl and School = both employed and school; Neither Empl nor School = neither employed nor in school; Row PctN = row percent; *n* = total number reported. .

Table 8 contains data for the method of exit only and the postsecondary outcome for students who exited high school for the combined three years of the study. The school districts' geographic classification was not examined. Overall, the students who exited high school with a diploma represented the highest percentage for the competitive employment, school/training, and both competitive employment outcome categories. Students who exited with a certificate of completion represented the highest percentage of neither competitive employment nor school/training. Students who exited by dropout

means were second in the category for neither competitive employment nor school/training.

Table 8
2011-2013 Combined Method of Exit and Postsecondary Outcome

	Comp Empl			School/ Training	Both Empl and School		Neither Empl nor School		All	
Exit	<i>n</i>	Row PctN	<i>N</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN
Diplo	2018	31.66	1320	20.71	1124	17.64	1911	29.99	6373	100
Certif	73	8.44	152	17.57	13	1.50	627	72.49	865	100
Drop	130	23.99	64	11.81	48	8.86	300	55.35	542	100
All	2221	28.55	1536	19.74	1185	15.23	2838	36.48	7780	100

Note. Comp Empl = employed at a job with competitive wages and benefits; School/training = enrolled in either a training program or school beyond 12th grade; Both Empl and School = both employed and school; Neither Empl nor School = neither employed nor in school; Row PctN = row percent; *n* = total number reported.

Table 9 presents the data for each individual year and the postsecondary outcome. Data from 2011 differ significantly from years 2012 and 2013 when examining the overall percentage against each postsecondary outcome category. The first year that data were collected using the current method was 2011. The data from 2012 and 2013 are consistent with the overall percentage for all categories of postsecondary outcome.

Table 9
2011-2013 Postsecondary Outcome

	Comp Empl		School/ Training		Both Empl and School		Neither Empl nor School		All	
year	<i>n</i>	Row PctN	<i>N</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN	<i>n</i>	Row PctN
2011	595	24.32	554	22.64	344	14.06	954	38.99	2447	100
2012	844	30.83	508	18.55	437	15.96	949	34.66	2738	100
2013	782	30.13	474	18.27	404	15.57	935	36.03	2595	100
All	2221	28.55	1536	19.74	1185	15.23	2838	36.48	7780	100

Note. Comp Empl = employed at a job with competitive wages and benefits; School/training = enrolled in either a training program or school beyond 12th grade; Both Empl and School = both employed and school; Neither Empl nor School = neither employed nor in school; Row PctN = row percent; *n* = total number reported.

Summary

The analysis of the data served to determine whether the method of exit from high school and or the geographic classification of school can influence the postsecondary outcome one year after exiting high school. A pattern that was present across the data revealed that a large population of students who exited from school by earning a certificate indicated that they were in the category of neither employed nor school one year after graduation. Another interesting pattern was the higher percent of students from rural and suburban areas in the neither employed nor school category when compared to schools from urban areas. In all geographic areas, students who exited high school by dropping out reported a higher percentage in the category of neither employed nor school than the other postsecondary outcome categories. The chi square (X^2) analysis revealed a significant difference between categories.

Because the computed value of Pearson's Chi Square 114.2690 exceeds the value in the table, for $p=.0001$ and $df = 6$, we can reject the null hypothesis and accept the research hypotheses that a relationship exists between post secondary outcomes for

students with disabilities and their geographic location. Other factors from the environment are impacting the outcome for students with disabilities from the three geographic classifications. The method of exit from high school strongly impacts the postsecondary outcome category, as well as the geographic classification of the school. No support system addresses the impact of geographic classification for students with disabilities who exit high school. As a result, more students fall into the last category of neither employed nor school. They are unemployed and lack the training needed to remedy the unemployment status.

CHAPTER V: DISCUSSION

This study explored the extent of the relationship between geographic classification and the postsecondary outcome for students with disabilities in Kentucky. In addition, the relationship was explored between the student's method of exit from high school and postsecondary outcome. The primary purpose of the study was to determine whether a strong relationship exists between the exiting schools' geographic classification and the postsecondary outcome and the relevance of that relationship for future students with disabilities as they exit high school. Students with disabilities exit high school and immediately enter the adult world with fewer services than in the secondary education setting. An examination of this relationship may provide knowledge to assist in developing programs to counteract any negative impacts of the geographic classification of an area.

The postsecondary world of today is much different than 20 years ago. The economy has declined, unemployment has increased, and the cost of living has increased. When students exit high school, they are immediately in the adult world. They have no choice but to take one of four paths: gain competitive employment, attend a postsecondary school or training program, both gain competitive employment and attend school, or neither employment nor school. The education system has changed in that schools are transitioning to a focus on preparing students for graduation with the skills needed to be ready for life, a career, or school. Kentucky has added a College and Career Readiness (CCR) component to the Kentucky Performance Rating for Educational Progress tests to ensure students are exiting high school with the skills needed to enter college or a career (<http://education.ky.gov>). The data included in this study were prior

to the CCR initiative, thus, a repeat of this study would be suggested once the CCR initiatives has been fully established. In a perfect world, all students would exit with the same skills and opportunities would be equally available, which is unrealistic. School systems consist of students from all ability levels, and the environment after high school is diverse as well. Students with disabilities struggle more than those without disabilities in both high school and postsecondary settings. In the school setting, support systems are in place to address the weaknesses and needs of students with disabilities. This is drastically different from the supports available after high school.

The method of exit from high school strongly impacts the postsecondary outcome category, as well as the geographic classification of the school. No support system addresses the impact of geographic classification for students with disabilities who exit high school. As a result, more students fall into the last category of neither employed nor school. They are unemployed and lack the training needed to remedy the unemployment status.

This study examined these relationships and their impact in Kentucky. Given the current economic conditions, a critical need exists to address these relationships or face a growing population of students with disabilities falling in the neither employed nor school category.

Discussion of Research Questions

General Research Question A: To what extent does the exit status of students with disabilities from each of the classifications of rural, suburban, and urban areas influence postsecondary outcomes?

The majority of students who exited high school by dropping out are in the category of neither competitively employed nor school for postsecondary outcome. All three classifications of rural, suburban, and urban reported over 50% of the dropout population as neither employed nor in school or training one year after leaving high school. Rural (60.38%) and suburban (58.50%) area students who exit by dropping out were slightly more likely to fall in this category than urban (50.00%) area dropout students.

The highest percentage of students exiting with a diploma from rural area schools were in the category of neither employed nor enrolled in school one year after exiting high school, with 33.49% reported. From suburban area schools, the highest category for postsecondary outcome was the competitive employment category, with 35.9%. The highest postsecondary category for urban area schools was the competitive employment category at 28.42%. If the four categories were evenly split into 25%, this finding would indicate a no significant difference. The percentage of 28.42% is not significantly different than the other three categories. Students from rural and suburban area schools were more likely to be the competitive employment category or the category of neither competitively employed nor school one year after graduating from high school. Students from urban area schools were likely to be in any of the three categories.

Students from this study who exited high school by earning a certificate are most likely to be in the category of neither competitive employed nor school one year after exiting high school. Certificate earning graduates from rural areas reported 79.32%, suburban areas reported 76.11%, and urban areas reported 67.41% in the neither competitively employed nor school category. While all three classification areas are

highest in the same category, students earning a certificate from urban area schools still fared better than those from rural or suburban area schools. This is not that surprising of a finding given that students earning a certificate are typically identified with a more severe disability,

General Research Question B: To what extent does the classification as rural, suburban, and urban of an area influence the postsecondary outcomes for students with disabilities?

Students with disabilities who graduated from any of the three classifications were more likely to fall in the category of neither than any other category. Educators refer to this as “graduated to the couch.” While some cases occur in which a student’s physical and/or mental health makes the possibility of employment or school unrealistic, that population is extremely low when discussing students with disabilities in general. Students from urban area schools are much more likely to be enrolled in school or training one year after exit from high school than students from rural or suburban schools.

Significance of the Study

Research illustrates that many differences exist between rural and urban school districts (Pennington et al., 2009). Research also is available that explores the postsecondary outcome of students from rural and urban schools, although without an emphasis on students with disabilities. This study is significant in that it examines students with disabilities one year after exit from Kentucky high schools from rural, suburban, and urban geographic classification areas.

The results from this study indicate that students with disabilities from rural and suburban areas do not fare as well as those with disabilities from urban areas. As a special education teacher in rural schools for 16 years, I have learned that not all of the blame can fall on the school system. At times the parents do not wish for their child to enter the workforce or school after high school. For example, many families are in fear of losing the financial supports they currently receive by accessing any other agencies or employment. Also impacting the postsecondary outcome for individuals who live in rural areas are the additional disadvantages that are not seen for those who live in urban areas. The post high school agencies such as vocational rehabilitation, supported employment, community living, and other support programs may not be local, which may require the need for reliable transportation, also indicating a need for income. This results in a vicious cycle, in which one need cannot be met without the other. Public transportation may not be available to allow access to agencies, employment, and training. A third disadvantage for rural communities is the decrease in annual family income when compared to the annual income of those from non-rural areas. Last, the amount of available jobs in the rural community is significantly lower than in urban areas, as fewer businesses are physically located within rural communities. In addition, unemployment is increasing and the specific population of this study has a documented disability. Therefore, the opportunity to gain employment is negatively impacted by the rural geographic classification.

Limitations of the Study

Some limitations were noted for this study, although they may or may not impact the data. Kentucky has only one major urban area; therefore, data may not be

comparable to states with multiple metropolitan areas. A second limitation is the data set used by the Kentucky Youth One Year Out (YOYO) from the Kentucky Postsecondary Outcomes to determine postsecondary success. The YOYO data are based on self reports from interviews; however, a lack of representation can be found relative to dropouts, students who left no further contact information, and individuals who have moved or changed their contact information within the one year after exiting high school. Other variables not explored in this study that may impact postsecondary outcomes for students identified with disabilities include, but are not limited to, the availability of resources and training programs, average annual family income, employment rates, and average level of education.

Implications for Policy and Practice

This research on the postsecondary outcome status for students with disabilities in relation to the geographic classifications of school districts is original, as it brings light to an under explored variable that hinders the success rate for students with disabilities in Kentucky's rural schools. New information from this study can be applied, not only in the state of Kentucky, but it could potentially be beneficial across the nation if replicated in other states. It is hoped that the results of this study with the original data source, the Kentucky Post Secondary Outcome Study, can be used to guide policy and procedures for planning and funding school districts across Kentucky. Support and funding are areas in need of exploration to determine whether an increase in postsecondary planning, training, and resources for rural areas may counteract the barriers that are rooted in the geographic classification as rural.

Additional funding can be applied to provide public transportation grants for rural communities, which will provide better access to postsecondary education, training, agency supports, and employment opportunities. Individuals on a medical card for insurance can use their medical cards to obtain transportation to medical appointments. The same can be applied for transportation to agencies, training, and employment sites. If something is not done to provide students with transportation, there is very little that can be done at the educational level to increase the positive postsecondary outcome for students with disabilities in rural Kentucky. Finally, federal guidelines are needed for those agencies that support students after high school and require their involvement in the student planning and interventions prior to the high school exit year. These federal guidelines also need to require accessible sites for agencies within each community at least one full day each week for ease of access. In most rural communities the nearest agency is at least thirty minutes away by vehicle. Because students with disabilities are much less likely to obtain a driver's license, many choose not to even attempt to get their license either because they cannot afford a car or their parents may not have access to a car. Addressing the barriers may ease the transition from high school to the adult world and foster the relationships needed for success.

Rural area schools can use additional funding to boost postsecondary opportunities. Job coach programs could provide more opportunities for students to job shadow and gain interview and other soft skills that are not taught in the regular instructional day. The funding could allow for districts to provide busing to other non-rural areas for job shadowing and technical training programs. Additional funding also may be used to add more local agencies that provide an array of services for rural

communities to both educate parents and support them through this process. This research provides Kentucky's policymakers with insight into factors that can be explored to improve the postsecondary outcome rates for students with disabilities from rural areas in Kentucky.

Recommendations for Further Research

Recommendations for further research include a comparison of the students with disabilities to those without disabilities who exit high school using the same data. Metrics for students without disabilities are collected in a different format than the data analyzed for this study. The collection of data for both populations in this manner could provide insight into whether this issue is unique to students with disabilities from rural area schools in Kentucky, or whether the pattern is the same for general education students without disabilities.

An additional interesting area for further research could involve an examination of the similarities between rural and suburban school districts, as both indicate similar results in this study for postsecondary outcomes of students with disabilities. A qualitative form of research could yield information that might provide insight into the reasons that these two areas are significantly different in terms of postsecondary outcomes when compared to students with disabilities from urban areas.

A third research recommendation would involve an investigation into the differences in program planning, monetary allotment, service delivery, and other factors that are applied in each of the three geographic classifications to determine the methods utilized by urban area schools that rural and suburban schools have not implemented.

This could provide valuable insight into programs that can be implemented to negate these differences for rural and suburban schools.

A fourth research recommendation of interest includes replicating the study once the College and Career Readiness (CCR) initiative has been fully implemented in Kentucky to determine whether the CCR initiative can negate the differences found within this study. If these same significant differences are found in the replicated study it will further support the need for new program implementations and the need for policy changes.

A final recommendation for further research is to replicate this study in other states to determine whether this problem is unique to KY or is a national concern. If it is a national issue, federal policy and procedures can be developed to address the issue. If it is a unique trend for Kentucky, then it should be addressed at the state level.

Other questions that have arisen as a result of this study: Does gender play a role in postsecondary outcomes? Is this one more level of the puzzle? Could generational poverty factor in to the results? What is the family structure of the students' homes from each of the three geographical locations and does that play a role? Are urban area data being used as a primary source of information for decision making? Is there an experience gap for students in rural communities that is not present in urban communities?

Conclusion

The universal purpose of this study was to determine the relationship between an area's geographic classification and the postsecondary outcome status for students with disabilities in Kentucky. It was believed that students with disabilities from rural areas

in Kentucky do not fare as well as those from urban area schools. The final results support this belief. A significant relationship was found between the geographic location of a school district and the postsecondary outcome for students with disabilities in Kentucky. When compared with those who exit from urban school areas, schools in rural areas have a higher percentage of students in the neither category, which indicates that they are not enrolled in a postsecondary training and are unemployed. Results also were similar for suburban areas.

Becoming a successful contributor and consumer to society is the ultimate goal for all youth as they exit high school. The findings of this study provide significant implications relative to planning for postsecondary outcomes for students with disabilities from rural area school districts. The findings will aid policymakers in engaging in discussions to determine programs and supports that can be implemented to negate the disadvantages that impact the postsecondary outcome for youth with disabilities in rural Kentucky. A College and Career readiness component has been added to the Kentucky Performance Rating for Educational Progress tests to ensure that students exit high school with the skills needed to enter college or a career (<http://education.ky.gov>). This should be taken a step further to better equip students with disabilities from rural areas with the skills necessary to gain successful postsecondary outcomes through additional funding and supports.

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APPENDIX A

Letter of Approval



March 5, 2014

To Whom It May Concern:

As the Project Director of the Kentucky Post School Outcomes Center (KyPSO), part of the Human Development Institute at the University of Kentucky, I have shared some of our findings with Ms. Stephanie Cornwell for use in her doctoral dissertation. These findings are from the Youth One Year Out former student interview.

All findings shared with Ms. Cornwell have been in aggregate format and cannot be linked to individual students. She has my approval to use these data for her dissertation.

If there are any further questions regarding this matter, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Tony LoBianco'.

Tony LoBianco, PhD
Project Director, Kentucky Post School Outcomes Center
Human Development Institute
1525 Bull Lea Road, Suite 160
Lexington, KY 40511
(859) 977-4050 Ext. 233
Tony.lobianco@uky.edu

APPENDIX B

IRB Letter of Approval



*INSTITUTIONAL REVIEW BOARD
OFFICE OF RESEARCH INTEGRITY*

DATE: July 8, 2014

TO: Stephanie Cornwell, MAE, BS
FROM: Western Kentucky University (WKU) IRB

PROJECT TITLE: [580121-1] THE RELATIONSHIP OF POST-SECONDARY OUTCOMES FOR STUDENTS WITH DISABILITIES IN KENTUCKY SCHOOLS

REFERENCE #: IRB 15-005

SUBMISSION TYPE: New Project

ACTION: APPROVED

APPROVAL DATE: July 7, 2014

REVIEW TYPE: Exempt from Full Board Review

Thank you for your submission of New Project materials for this project. The Western Kentucky University (WKU) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Exempt from Full Board Review based on the applicable federal regulation.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Paul Mooney at (270) 745-2129 or irb@wku.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Western Kentucky University (WKU) IRB's records.